The Public Transportation Service Design for Women on the Basis of Fuzzy-Kano Quality Function Deployment

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ABSTRACT

Women have so far dominated the public transportation. However, the service quality provided, in general, has taken for granted the women’s needs. It is therefore urged that some efforts to promote the satisfactory service intended for women passengers need to be taken.

The present study was aimed at identifying the need of public transportation service system for women, comparing the general public transportation service system to the gender-oriented public transportation service system, and designing the public transportation service system for women.

The study started with the identification of Voice of Customer (VoC) by employing the Kano method, that is, by administering the functional and dysfunctional questionnaire to the respondent. The next step was to use the Fuzzy method to reduce subjectivity of the respondents’ answer. Each of the attributes was then classified into the Kano categories: must be, one dimensional, attractive, and indifferent. To design the service system, the Quality Function Deployment (QFD) was employed.

Based on the result of QFD analyses, it showed that there were eleven criteria for the service needs of VoC and 21 attributes of technique responses used to design the service system. In addition, based on calculation of VoC for women bus passengers, the highest score was of the security attribute. For that purpose, what needed to be done was to assign information centre on bus stops and terminals.

Key word: public transportation, Kano model, Fuzzy, QFD.